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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,590	04/03/2002	Zhi Xian Chen	2577-124A	1775
6449	7590	11/04/2005	EXAMINER	
ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005			KUBELIK, ANNE R	
			ART UNIT	PAPER NUMBER
			1638	

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/009,590	Applicant(s) CHEN ET AL.	
	Examiner Anne R. Kubelik	Art Unit 1638	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-14 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 9 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6 October 2005 and the claims filed 8 August 2005 have been entered.
2. Claims 1-14 and 16-19 are pending.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Objections***

4. Claim 19 is objected to because "petiole" in part (a) should be plural.

### ***Claim Rejections - 35 USC § 112***

5. Claims 1-14 and 16-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention. Dependent claims are included in all rejections.

The term "low concentrations" in claim 1 is a relative term that renders the claim indefinite. The term "low concentrations" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

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In claim 1 the media in step (c) has hormones at "low concentrations"; if Applicant intends it to imply at least some hormone, then claims 16 and 17, in which the hormone concentration can be zero, do not properly limit claim 1.

Claim 19 lacks antecedent basis for the limitation "the petiole explants" in part (b).

*Claim Rejections - 35 USC § 102*

6. Claims 1-6 and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Strickland (WO 97/12512). The rejection is repeated for the reasons of record as set forth in the Office action mailed 6 May 2005, as applied to claims 1-6 and 15-17. Applicant's arguments filed 8 August 2005 have been fully considered but they are not persuasive.

Applicant urges that In re Shoenwald and Hafner are about 112, 1<sup>st</sup> rejections (response pg 7-9).

This is not found persuasive, as Applicant has not provided evidence from the art that Strickland is not enabled.

Applicant submitted portions of the Office actions from Strickland's 08/539, 176 application, to say that the Office did not find any tissue other than hypocotyls enabled (response pg 9-11).

This is not found persuasive. The examiner cannot discuss the prosecution of any other patent application. Thus, the submission of portions of that prosecution is improper, and will not be considered at any time.

It is noted that because Strickland teaches what Applicant claims, that is transformation of cotton petioles, culturing in the absence of plant hormones (which is a very "low

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concentration” of hormones), and regeneration into plants, Applicant is arguing that their invention is not enabled within the full scope of the claims.

*Claim Rejections - 35 USC § 103*

7. Claims 1-8, 10-14 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strickland (WO 97/12512) in view of Finer (1988, Plant Cell Rep. 7:399-402).

The rejection is repeated for the reasons of record as set forth in the Office action mailed 6 May 2005, as applied to claims 1-8 and 10-17. Applicant's arguments filed 8 August 2005 have been fully considered but they are not persuasive.

Applicant urges that Strickland does not teach a method of producing a transgenic cotton plant using callus from a petiole explant, as discussed above (response pg 11 and 12).

This is not found persuasive for the reasons indicated above.

Applicant urges that the instant method uses low concentrations of plant hormones, while Strickland teaches that the method should be hormone free (response pg 11-12).

This is not found persuasive because “low concentrations” include a concentration of 0 mg/l, as is made clear by the instant claims 16 and 17.

Applicant urges that Finer does not overcome the deficiencies of Strickland, and teaches use of high 2,4-D concentrations; the references are contradictory (response pg 12-13).

This is not found persuasive. Finer is used to teach a nitrogen source, not a hormone concentration. Finer teaches embryoid formation within 2 weeks in a culture media with 15 mM (about 2.2 g/l) glutamine as a nitrogen source (pg 400, left column, paragraph 1)

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Applicant urges that the references do not provide motivation to combine the use of petioles as a source of callus in medium with low hormone concentrations (response pg 13-14).

This is not found persuasive because this is taught by Strickland.

8. Claim 19 would be allowable if rewritten or amended to overcome the objections and the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

9. Claims 9 and 18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### *Conclusion*

10. No claim is allowed

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne R. Kubelik, whose telephone number is (571) 272-0801. The examiner can normally be reached Monday through Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached at (571) 272-0804. The central fax number for official correspondence is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also

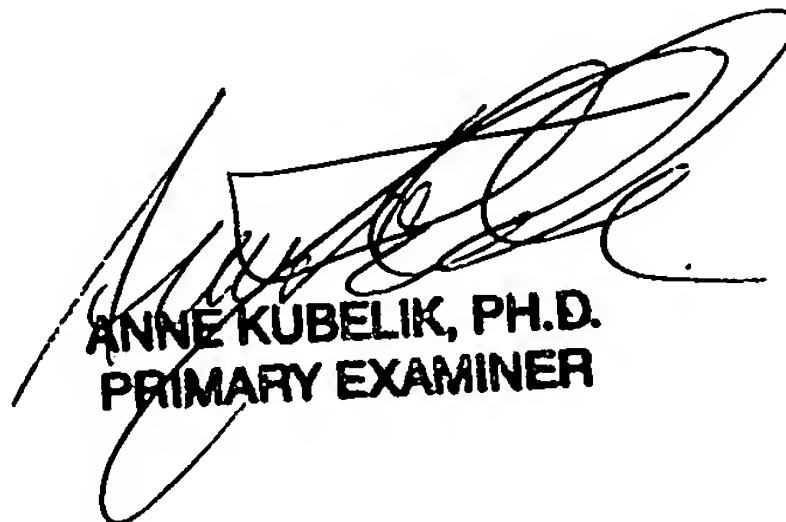
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enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Anne R. Kubelik, Ph.D.

November 1, 2005



**ANNE KUBELIK, PH.D.  
PRIMARY EXAMINER**